

Amendments to the claims (this listing replaces all previous listings):

1. (Currently Amended) A method comprising:
incorporating a multi-port switch into a multi-node computer system; and
assigning at least a first port of the multi-port switch to a first domain of the nodes; and
assigning at least a second port of the multi-port switch to a second domain of the nodes,
the first domain of the nodes and the second domain having separate and independent memory
structures.
2. (Original) The method of claim 1 further comprising:
delivering transactions that are received by the multi-port switch and are identified as
associated with the first domain, to the at least a first or more ports assigned to the first domain.
3. (Original) The method of claim 1 further comprising:
connecting nodes associated with the first domain to the at least a first port assigned to
the first domain.
4. (Canceled)
5. (Currently Amended) The method of ~~claim 4~~ claim 1 further comprising:
delivering transactions, which are received by the multi-port switch and are identified as
associated with the second domain, to the at least a second or more ports assigned to the second
domain.
6. (Currently Amended) The method of ~~claim 4~~ claim 1 further comprising:
connecting nodes associated with the second domain to ports assigned to that second
domain.
7. (Original) The method of claim 1 further comprising:

assigning at least a third port of the multi-port switch to a third domain; and connecting nodes associated with the third domain to ports assigned to that third domain.

8. (Original) The method of claim 7 further comprising: delivering transactions, which are received by the multi-port switch and specify the third domain, to the at least a third or more ports assigned to the third domain.

9. (Original) The method of claim 2 further comprising: monitoring broadcast transactions generated for the first domain; and transmitting these broadcast transactions to only the at least a first or more ports assigned to the first domain.

10. (Currently Amended) The method of claim 3 further comprising: maintaining ~~the coherency of the cache~~ a coherency of a cache memory for the first domain.

11. (Currently Amended) The method of claim 10 wherein said maintaining the coherency includes:

monitoring ~~the caching a caching~~ of system memory by the nodes associated with the first domain; and

informing the nodes requiring a cache update that ~~the content of the system memory they have cached has changed.~~

12. (Currently Amended) A domain partitioning process for creating multiple domains in a multi-node computer system comprising:
~~a multi-port switch containing ports; and~~
a first domain port assignment process for assigning at least a first port of said a multi-port switch to a first domain; and

a second domain port assignment process for assigning at least a second port of the multi-port switch to a second domain of the nodes, the first domain of the nodes and the second domain of the nodes having separate and independent memory structures.

13. (Original) The domain partitioning process of claim 12 further comprising:
a first domain transaction routing process for routing transactions, which are received by said multi-port switch and specify the first domain, to one or more ports assigned to the first domain.

14. (Canceled)

15. (Currently Amended) The domain partitioning process of ~~claim 14~~ claim 12 further comprising:

a second domain transaction routing process for routing transactions, which are received by the multi-port switch and specify the second domain, to one or more ports assigned to the second domain.

16. (Currently Amended) The domain partitioning process of ~~claim 14~~ claim 12 further comprising:

a third domain port assignment process for assigning at least a third port of the multi-port switch to a third domain.

17. (Original) The domain partitioning process of claim 16 further comprising:

a third domain transaction routing process for routing transactions, which are received by the multi-port switch and specify the third domain, to one or more ports assigned to the third domain.

18. (Original) The domain partitioning process of claim 13 further comprising:

a broadcast partitioning process for monitoring broadcast transactions generated for the first domain and transmitting these broadcast transactions to only the one or more ports assigned to the first domain.

19. (Currently Amended) The domain partitioning process of claim 13 further comprising:

a domain cache coherency process for monitoring the caching of system memory by the nodes associated with the first domain, and informing the nodes requiring a cache update that the content of the system memory they have cached has changed.

20. (Currently Amended) A domain partitioning process for creating multiple domains in a multi-node computer system that includes a multi-port switch containing ports, the process comprising:

~~a multi-port switch containing a plurality of ports; and~~

a port assignment process for assigning at least one a first port of said multi-port switch to a first one of a plurality of domains; and

a second port assignment process for assigning at least a second port of the multi-port switch to a second one of a plurality of domains, the first one of a plurality of domains and the second one of a plurality of domains having separate and independent memory structures.

21. (Original) The domain partitioning process of claim 20 further comprising:

a transaction routing process for routing domain-specific transactions received by said multi-port switch to one or more ports assigned to the specified domain.

22. (Currently Amended) A computer program product residing on a computer readable medium having a plurality of instructions stored thereon which, when executed by ~~the~~ a processor, cause that processor to:

assign at least a first port of a multi-port switch to a first domain;

assign at least a second port of the multi-port switch to a second domain, the first domain and the second domain having separate and independent memory structures; and
route transactions, which are received by the multi-port switch and specify the first domain, to one or more ports assigned to the first domain.

23. (Original) The computer program product of claim 22 wherein said computer readable medium is a read-only memory.

24. (Original) The computer program product of claim 22 wherein said computer readable medium is a hard disk drive.

25. (Currently Amended) A processor and memory configured to:
assign at least a first port of a multi-port switch to a first domain;
assign at least a second port of the multi-port switch to a second domain, the first domain and the second domain having separate and independent memory structures; and
route transactions, which are received by the multi-port switch and specify the first domain, to one or more ports assigned to the first domain.

26. (Original) The processor and memory of claim 25 wherein said processor and memory are incorporated into a network server.

27. (Original) The processor and memory of claim 25 wherein said processor and memory are incorporated into a workstation.

28. (Currently Amended) A domain partitioning system comprising:
a multi-port switch containing a plurality of ports;
a IO hub controller connected to one of said ports;
a scalable node controller connected to one of said ports; and

at least one microprocessor connected to said scalable node controller; wherein
the domain partitioning system is configured to include a first domain port assignment
process for assigning at least a first port of said multi-port switch to a first domain;
the domain partitioning system is configured to include a second domain port assignment
process for assigning at least a second port of the multi-port switch to a second domain of the
nodes, the first domain and the second domain having separate and independent memory
structures; and
the domain partitioning system is configured to include a first domain transaction routing
process for routing transactions, which are received by said multi-port switch and specify the
first domain, to one or more ports assigned to the first domain.

29. (Canceled)

30. (Currently Amended) The domain partitioning system of ~~claim 29~~ claim 28
further comprising:

a second domain transaction routing process for routing transactions, which are received
by said multi-port switch and specify the second domain, to one or more ports assigned to the
second domain.